

## Scalp sarcoidosis mimicking discoid lupus erythematosus with lichenoid features in histology

### To the Editor,

Although sarcoidosis is a multisystem disease which commonly involves the skin, sarcoidal alopecia is rare and predominantly affects African-American women<sup>1,2</sup>. Here, we have reported a case of sarcoidal alopecia that mimicked discoid lupus erythematosus (DLE). Our case is a specific, but unusual form of sarcoidosis that has a clinical morphology of DLE with histologic lichenoid features.

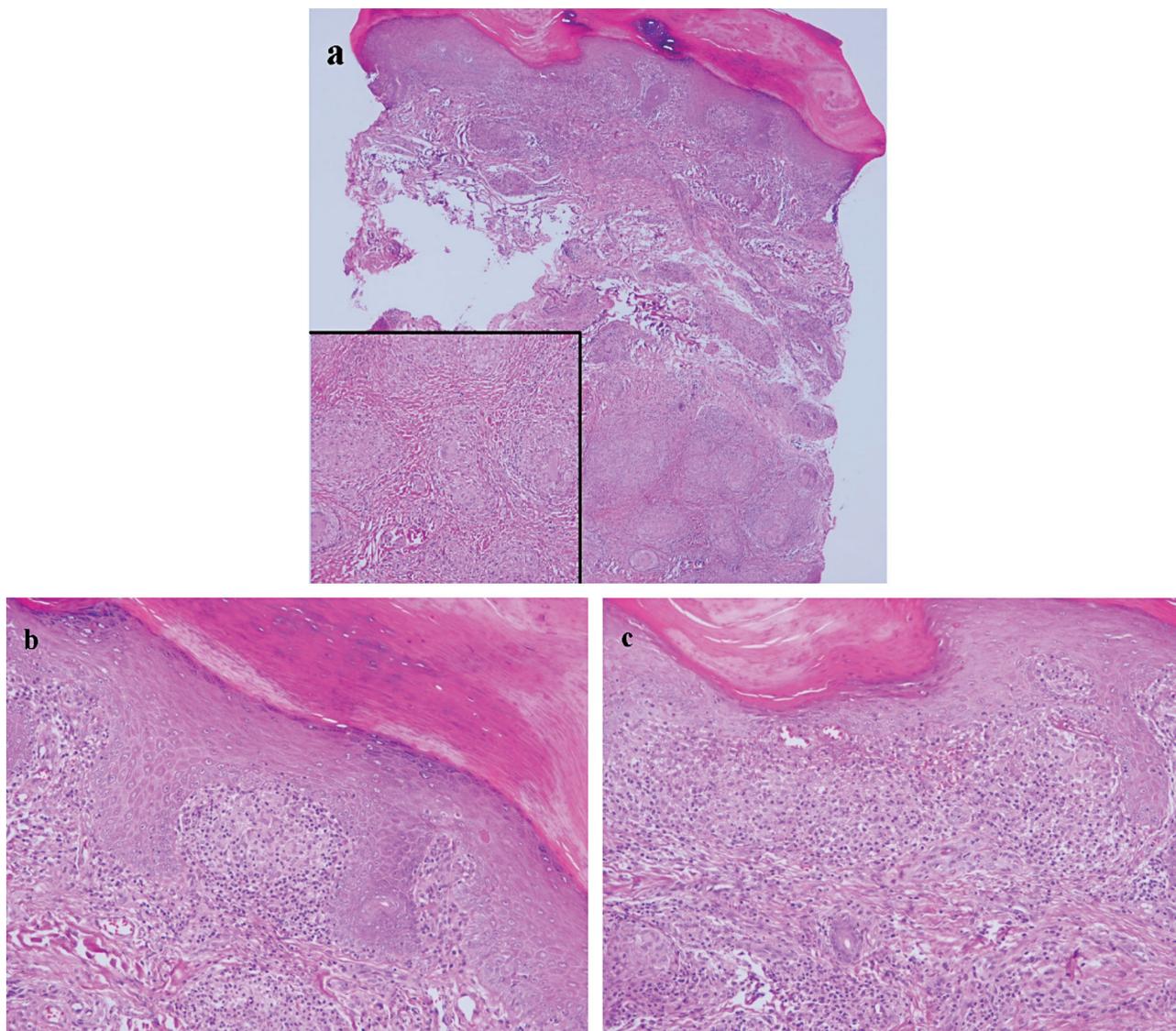
A 55-year-old man presented with a 9-month history of well-circumscribed, erythematous, slightly scaling, atrophic, and alopetic plaques on his scalp located mostly on the vertex and occipital areas (Figure 1a). There were no areas of hyper- or hypopigmentation on these lesions. The patient had a few closely set reddish brown nodules on his right leg (Figure 1.b). The patient was otherwise healthy and had never previously received any

specific treatment. Biopsy specimens from an area of the alopecia and the leg lesion showed similar findings with non-caseating granulomas (Figure 2). The specimens stained negative according to Gram, periodic acid-Schiff, and Ziehl-Neelson stains, and negative for polarization, which led to a diagnosis of sarcoidosis. Interestingly, we observed an interface pattern in the microscopic study of both DLE-like and nodular lesions, a finding rarely reported in sarcoidosis<sup>3</sup>. Serology for syphilis was negative. Given the high frequency of systemic involvement in scalp sarcoidosis<sup>1,2</sup>, we performed a careful workup and discovered intrathoracic involvement (bilateral hilar lymphadenopathy), a finding in most reported patients with sarcoidal alopecia. He had elevated serum ACE levels. Other organs were not involved. Therapy with clobetasol ointment was unsuccessful but the patient responded significantly to oral prednisolone (starting dose: 30 mg daily).

The scalp is a rare manifestation of cutaneous



**Figure 1.** 1.a. Erythematous, scaly, atrophic, and alopetic plaques on the scalp. 1.b. Reddish brown nodules on the right leg.



**Figure 2.** **2.a.** The association of non-caseating granulomas and interface pattern. Inset (**2.a**) is a magnified picture of the dermis that shows classic sarcoidal granulomas composed of epithelioid cells and multinucleated giant cells. (**2.b** and **2.c**) Upper dermal granulomatous infiltrate with a band-like pattern that obscures the dermo-epidermal junction. Few cytotid bodies within the epidermis (**2.b**) and hyperkeratosis with hypergranulosis are also evident. (**2.a** H&E 40×, **2.b** and **2.c** H&E 100×)

sarcoidosis and alopecia may begin with an atrophic patch, sometimes with erythema and scaling, and usually within a localized area. It often presents as a scarring alopecia that may very rarely resemble DLE<sup>1,2</sup>. Fewer than 30 cases of scalp sarcoidosis have been reported, the majority of whom were Africa-American females with systemic involvement<sup>1,2,4</sup>. Scalp sarcoidosis rarely presents as the only manifestation of cutaneous sarcoidosis and is often associated with other cutaneous findings<sup>1,5</sup>, exactly as we have found in the patient's leg. A through cutaneous examination is therefore indicated in

cases suspicious for scalp sarcoidosis.

Our case was unusual because the sarcoidal alopecia had a clinical picture that closely resembled DLE in addition to an association of non-caseating granulomas and an interface pattern, a finding very rarely reported in sarcoidosis<sup>3</sup>.

Although steroids and other immunosuppressive drugs have been used to treat scalp sarcoidosis, usually the results are unsatisfactory<sup>1,4,6</sup>. In the current case, we have obtained relatively good results with systemic steroids in terms of both scalp and leg lesions.

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